

NWIRP/NG Site-June 22, 2015 Quarterly Meeting Agenda (in black) and Meeting Notes (in blue)

Attendees:

Robert Schick, DEC-Director, DER
Michael Ryan, DEC-Deputy Director, DER
Jim Harrington, DEC-Director, Remedial Bureau A, DER
Stan Carey, Superintendent, MWD
Paul Granger, H2M (representing MWD)
Michael Boufis, Superintendent, BWD
Richard Humann, H2M (representing BWD)
Ralph Atria, Commissioner, SFWD
Francis Koch, Superintendent SFWD
Gary Loesch, H2M (representing SFWD)
Doug Garbarini, EPA-Branch Chief, NYRB
Pete Mannino, EPA-Section Chief, WNYRS
Richard Mach, OASN (EI&E)
Lora Fly, NAVFAC-Mid-Atlantic
Ed Hannon, NG ESH&M
Mike Wolfert, ARCADIS
Participating by phone:
Lloyd Wilson, NYSDOH
Bill Gilday, NYSDOH
Charlotte Bethoney, NYSDOH
Dan St. Germain, HDR
Michael Lehtinen, HDR

1. **Status of efforts regarding Chapter 543 of the Laws of 2014 – evaluation of options relative to the groundwater plume associated with the former Navy/Grumman Bethpage facility**
 - a. **Requirements of law.** DEC noted that the law requires that DEC prepare a report delineating options for intercepting and remediating the plume which: focus on hydraulic containment; protect natural resources such as Great South Bay; estimates cost and scope of such a project and identifies how NYS can force the Navy to pay for it. DEC has hired HDR to develop the report on containment and will prepare the other pieces and the final report in house.
 - b. **Introduction of DEC consultant (participating via phone).** HDR introduced themselves and provided background on experience. HDR advised that it had no conflicts of interest in performing this work for DEC with respect to the Navy and NG.
 - c. **Scope of work and schedule.** DEC noted that a kickoff meeting had occurred, documents had been provided to HDR, and a draft report is anticipated by end of year.
 - d. **Discussion.** A question was raised regarding review/input by WD's in light of schedule. DEC indicated that while the target for completing the report is the end of the year, the WDs will be provided an opportunity to review the document prior to its being finalized.
2. **ONCT Effectiveness**

- a. **NG overview of the effectiveness evaluation.** NG provided a power point presentation (attached) that summarized information in their October 2014 PRR and also provided an update to the October PRR that incorporated additional more recent data including Navy data. The presentation focused on the significant decreases in concentrations in specific wells and the bifurcation of the plume as indicators of the effectiveness of the system.
 - b. **BWD questions regarding basis for DEC approval of workplan and recent Navy data.** NG's presentation included an update of their PRR evaluation of the effectiveness of the system that included the Navy data and further explained the rationale for data points used in the evaluation.
 - **Suitability of the approved elevation, number and location of data points used in the evaluation.**
 - **Suitability of data set used in the evaluation (2011-2013).** Consideration of Navy data for VPBs 142, 144, 156 and MW RE108D2 (obtained after the Arcadis 2011-2013 data) with respect to ONCT effectiveness.
 - c. **Navy follow up work.** The Navy provided a power point presentation (attached) that included information regarding additional borings planned upgradient of the RE-108 hotspot.
3. **Status of additional "Hotspot" work.** The Navy provided a power point presentation that summarized the status of existing and planned work on the hotspot delineation and the Plant 6 pilot study (attached).
 - **Plant 6 Pilot Study.** The status of the BWD approvals to enter into an agreement with the Navy for the pilot study was discussed. Under the terms of the agreement BWD would be considered a subcontractor to the Navy so that BWD could receive appropriate compensation for their expenses/resources utilized. The current thinking is that BWD would continue to operate 6-2 which is currently operating 24/7 due to high demand. BWD was still in the process of obtaining the necessary approvals (anyone have more info). BWD and the Navy indicated it was important to perform the pilot this summer. NYSDOH questioned whether it was appropriate to utilize/distribute water pumped from Well 6-2 during the pilot study. BWD explained that Well 6-2 would not be utilized any differently during the pilot than it typically would be during this period; that the well would typically be used at close to capacity due to demand and constraints on other BWD wells. NYSDOH continued to express concern and requested a copy of the plan. The group agreed that it might be best to have a separate call to discuss NYSDOH concerns and that the issue may need to be discussed at more senior levels. BWD also noted that it intended to upgrade the treatment system for Plant 6-2; that this would involve shutting down the deep well for up to two years (though they were working on ways to shorten the down time) and that the shutdown could occur within six months.
 - **Additional delineation.** Plans for additional delineation and investigation were addressed by the Navy as part of the power point presentation.
 - **Plans for addressing contamination not captured by 6-2.** The Navy indicated that the pilot work would enable them to better define the area of the plume that would be captured by the continuous operation of Well 6-2; the Navy noted that a short-term pumping test and capture zone analysis conducted in 2013 suggest that the well may be able to capture most of the plume (85-90%) that is above 1ppm. It was noted that EPA's expectation was that the contamination at TT-101 (greater than 500 ppb) will need to

be addressed. The Navy noted that it had presented this matter to its management and was awaiting direction from management. [Note: The Navy has since confirmed it will attempt to capture the 500 ppb concentration of contaminants but cannot guarantee complete capture of the 500 ppb due to the lack of open space to site the extraction well(s) in an optimum location.]

- **Status of NG submittals required pursuant to OU 2 Consent Order.** See attached NG power point presentation.
 - **NG/Navy coordination on Hotspot work.** Both the Navy and NG covered this topic in their attached presentations and noted that discussions on coordination were continuing.
4. **Disposition of treated water if well 6-2 utilized to capture mass of the hotspot.** It was noted that BWD is interested in getting water from outside the plume and BWD expressed a willingness to allow another party to lease or otherwise take over the infrastructure at the wells to utilize them for addressing the plume under certain conditions. If well 6-2 needs to continue to be used for water supply purposes, and the extent of withdrawals exceeds the current status of withdrawals, NYSDOH expressed concern, but did not indicate that it was prohibited by regulations or written guidance/policy. The use of recharge basins to the south of the treatment system was discussed.
 5. **Discussion of potential for use of wells at BWD Plants 4,5,6 should BWD cease using them as public water supply wells.** The parties recognized the significance of the existing BWD systems and the need to assess the long-term viability of the infrastructure. It was suggested that water could be extracted from the hot spot and piped back for treatment at one of the facilities for treatment. BWD noted that it was looking at long term viability of continuing to operate 4,5 & 6 and considering building facilities outside of the plume.
 6. **Status of sentinel well installation.** The Navy indicated that the new sentinel wells for SFWD were installed and that the VPBs for the MWD had been installed and the wells were being installed [Note: the Navy has since confirmed that installation of all outpost wells has been completed].
 7. **DEC follow up regarding 1,4-dioxane, perchlorate and radium 226 and 228 sampling performed to date and to be performed.** BWD indicated that it would work with NG and the Navy to obtain existing info on perchlorates/and or access to wells for perchlorate sampling. DEC indicated that it would perform radium 226 and 228 sampling and would share a proposed list of wells for sampling with all parties. MWD requested a copy of the 1,4-dioxane data collected by NG [Note that the Navy has been sampling and NG indicated they will sample their wells for 1,4-dioxane using the low detection limit method]. The water districts requested a copy of the perchlorate data used by DEC in their evaluation. Since weapon systems were not manufactured at the Navy or NG facilities, perchlorates were not identified as a contaminant of concern. During the discussion, other sources were identified (a fireworks company and road flares) that could have contributed to the presences of perchlorates in the groundwater. It was agreed that the water districts would contact Navy and/or NG if they wished to sample Navy-owned or NG-owned wells.
 8. **Data sharing/timing.** The parties agreed that timing of data sharing had been adequate/improved and is currently working to their satisfaction.
 9. **Community outreach**
 - **Drilling, access.** The parties agreed that the modifications to procedures for access and notification of the community appears to be working. Complaints have declined significantly.

- **Next RAB meeting.** The next RAB meeting is August 11. It was agreed that, similar to the last RAB meeting, it would be beneficial to have participation of the water districts and DEC at the beginning of the meeting to allay potential concerns about the quality of the water entering the water supply.

10. **Next meeting date (September).** It was agreed that the next meeting should be scheduled for mid-October.